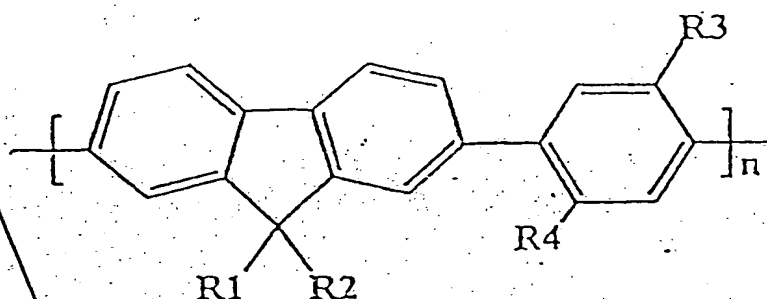


We Claim:

1. A polymeric material comprising alternate substituted fluorene and phenylene units, as represented by the following formula



wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$ , which may be identical or different, are each selected from the group consisting of H, a  $(C_1 - C_{22})$  linear or branched alkyl, alkoxy or oligo (oxyethylene) group, a  $(C_6 - C_{30})$  cycloalkyl group, and an unsubstituted or substituted aryl group, and  $n$  is from about 3 to about 5000.

2. A polymeric material according to claim 1 wherein  $R_1$  and  $R_2$ , which may be identical or different, are each selected from the group consisting of H,  $(C_1 - C_{22})$  linear or branched alkyl groups, oligo (oxyethylene) groups or unsubstituted or substituted aryl groups, and wherein  $R_3$  and  $R_4$ , which may be identical or different, are each selected from the group consisting of H, alkoxy groups, oligo (oxyethylene) groups,  $(C_6 - C_{30})$  cycloalkyl groups or unsubstituted or substituted aryl groups.

3. A polymeric material according to claim 1 wherein  $R_1$  and  $R_2$  are dialkyl groups and wherein  $R_3$  and  $R_4$  are dialkoxyl groups.

4. A polymeric material according to claim 1 wherein  $n$  is from about 5 to about 1000.

5. A polymeric material according to claim 1 which emits visible light having a wavelength of between 350 and 550 nm.
6. A polymeric material according to claim 5 which emits visible light having a wavelength of about 430 nm.
7. A light emitting diode comprising a polymeric material in accordance with claim 1.
8. A light emitting diode having an anode layer, a polymer layer comprising a polymeric material in accordance with claim 1, and a metal cathode layer.
9. A light emitting diode according to claim 7 having an additional hole transporting layer between the anode layer and the polymer layer.
10. A light emitting diode according to claim 9 wherein the hole transporting layer includes polyvinylcarbazole.
11. A light emitting diode according to claim 9 having an additional hole injection layer between the hole transporting layer and the polymer layer.
12. A light emitting diode according to claim 11 wherein the hole injection layer comprises copper phthalocyanine.

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13. A light emitting diode according to claim 11 wherein the hole injection layer comprises polyaniline.

14. A full color display incorporating a polymeric material in accordance with claim 1.

15. A full color display incorporating a light emitting diode in accordance with claim 7.

16. A polymeric material according to claim 1 made in accordance with a Suzuki coupling process.

17. A polymeric material according to claim 16 wherein the monomers are 2,7-diboronates of 9,9-disubstituted fluorenes and 1,4-dibromo-2,5-disubstituted benzenes.

18. A polymeric material according to claim 16 wherein the monomers are prepared using Grignard reagents.

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